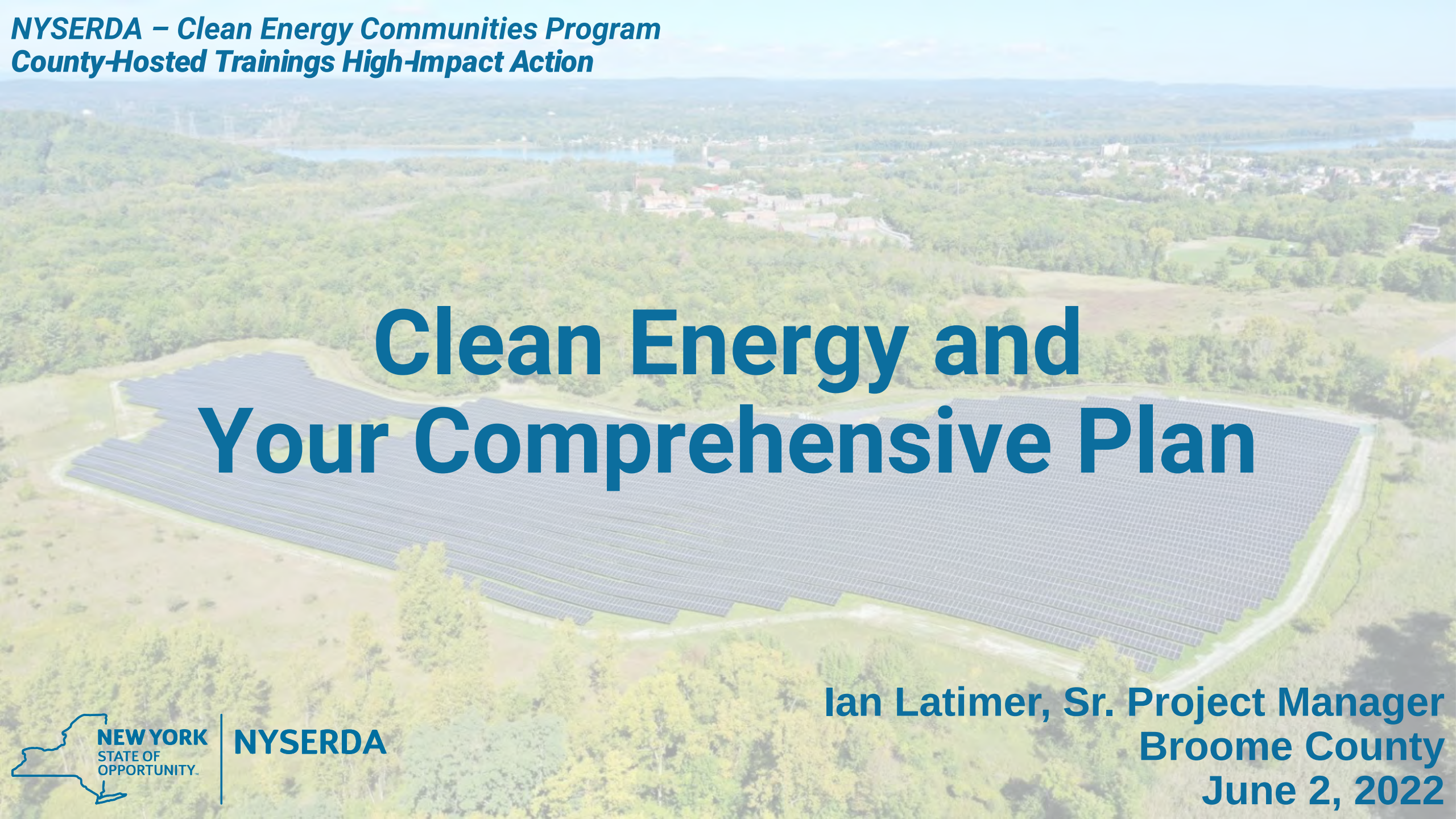
NYSERDA – Clean Energy Communities Program
County-Hosted Trainings High-Impact Action



Clean Energy and Your Comprehensive Plan

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Broome County

June 2, 2022

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Agenda:

- **Introduction**
- **Overviews:**
  - Clean Energy
  - Comprehensive Planning
- **Clean Energy and Your Comprehensive Plan**
- **Resources**

Introduction

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cleanenergyhelp@nyserda.ny.gov

Clean Energy Siting Team:
www.nyserda.ny.gov/Siting

Overview:
Clean Energy in NYS

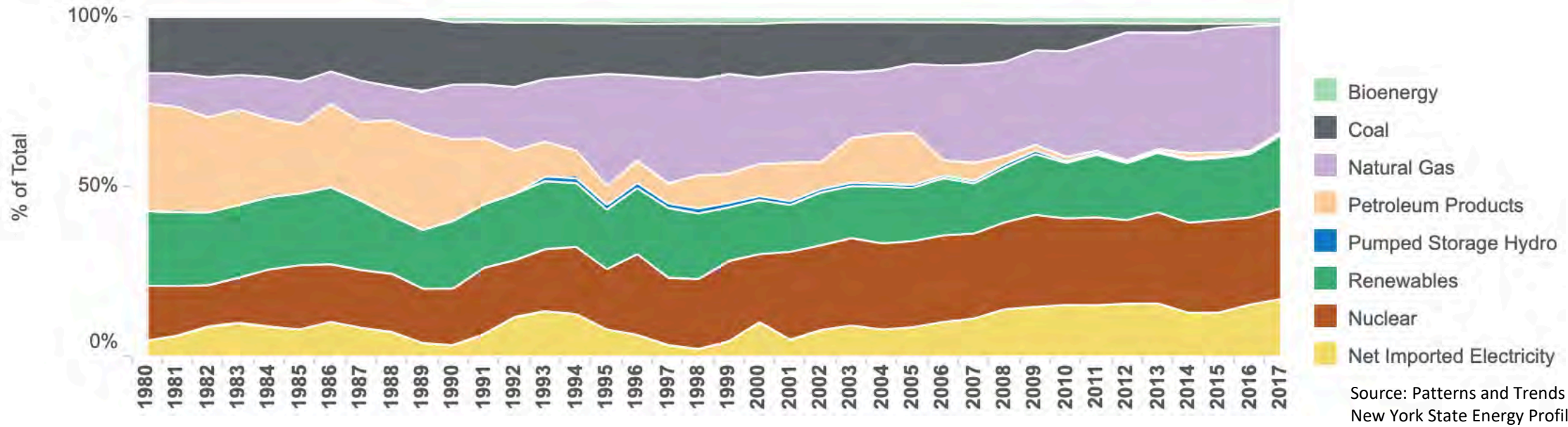
The Climate Leadership and Community Protection Act (Climate Act)

Electricity Sector Goals:

- 70% Renewable Electricity by 2030
- 100% Emissions-Free Grid by 2040

Technology-Specific Goals:

- 10,000 MW Distributed Solar by 2025*
- 9,000 MW Offshore Wind by 2035
- 1,500 MW Energy Storage by 2025; 6,000 MW by 2030*



Source: Patterns and Trends - New York State Energy Profile (NYSERDA)

Clean Energy Intro: Solar Energy

- **Solar Photovoltaics (PV) vs. Concentrated Solar Power (CSP) vs. Solar Thermal**
- **Types of Solar PV installations:**
  - Residential
  - Commercial
    - Community Solar
  - Utility-Scale

"Behind the Meter"
Rooftop or Ground-Mounted

"Front of the Meter"
Ground-Mounted

- **Ground-Mounted Solar**
  - 5-7 acres per MW
  - 100-200 homes per MW

Clean Energy Intro: Wind Energy

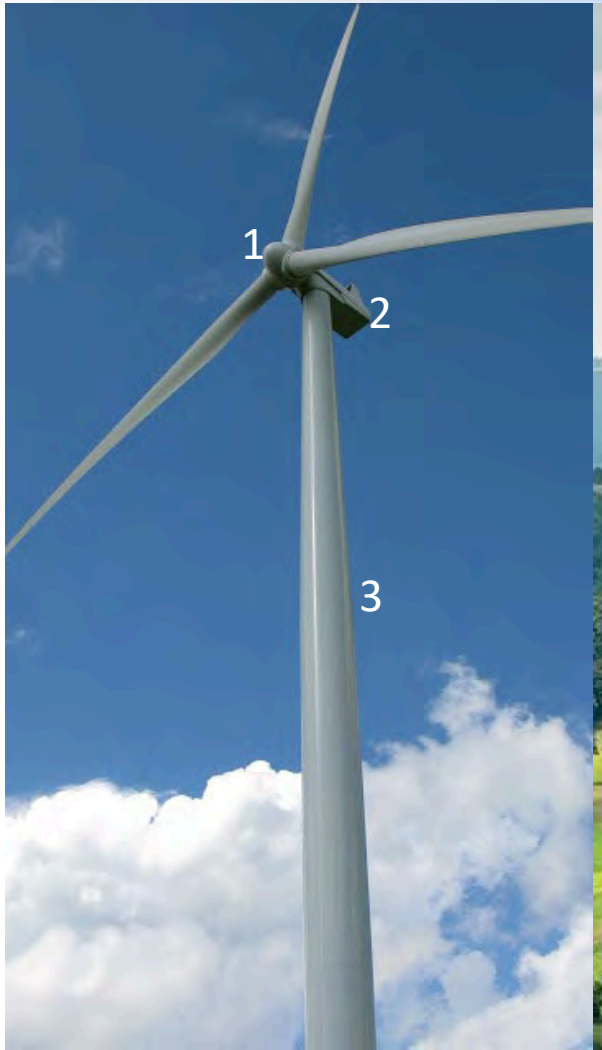
System Components:

1. Rotor
2. Nacelle
3. Tower

System Characteristics:

- Increasing turbine capacities/sizes:
  - 2-3 MW/turbine
  - Increased rotor diameters
  - Increased tower/hub heights

- Onshore wind turbines typically smaller than offshore



Clean Energy Intro: Energy Storage

System Components:

- Cells -> Modules -> Racks
- Battery Management System (BMS)

Installation Types:

- Residential
- Commercial
- Utility-Scale

"Behind the Meter"

"Front of the Meter"

Details/Purposes:

- Often paired with intermittent renewables
- Backup power
- "Energy arbitrage"
- Grid upgrade deferrals
- Grid services

Primary Land Use/Local Considerations

All technologies:

- Appropriate location/zoning
- Environmental impacts
- Bulk/area standards
- Decommissioning
- Taxation

Solar:

- Visual/aesthetic impacts
- Agricultural land impacts

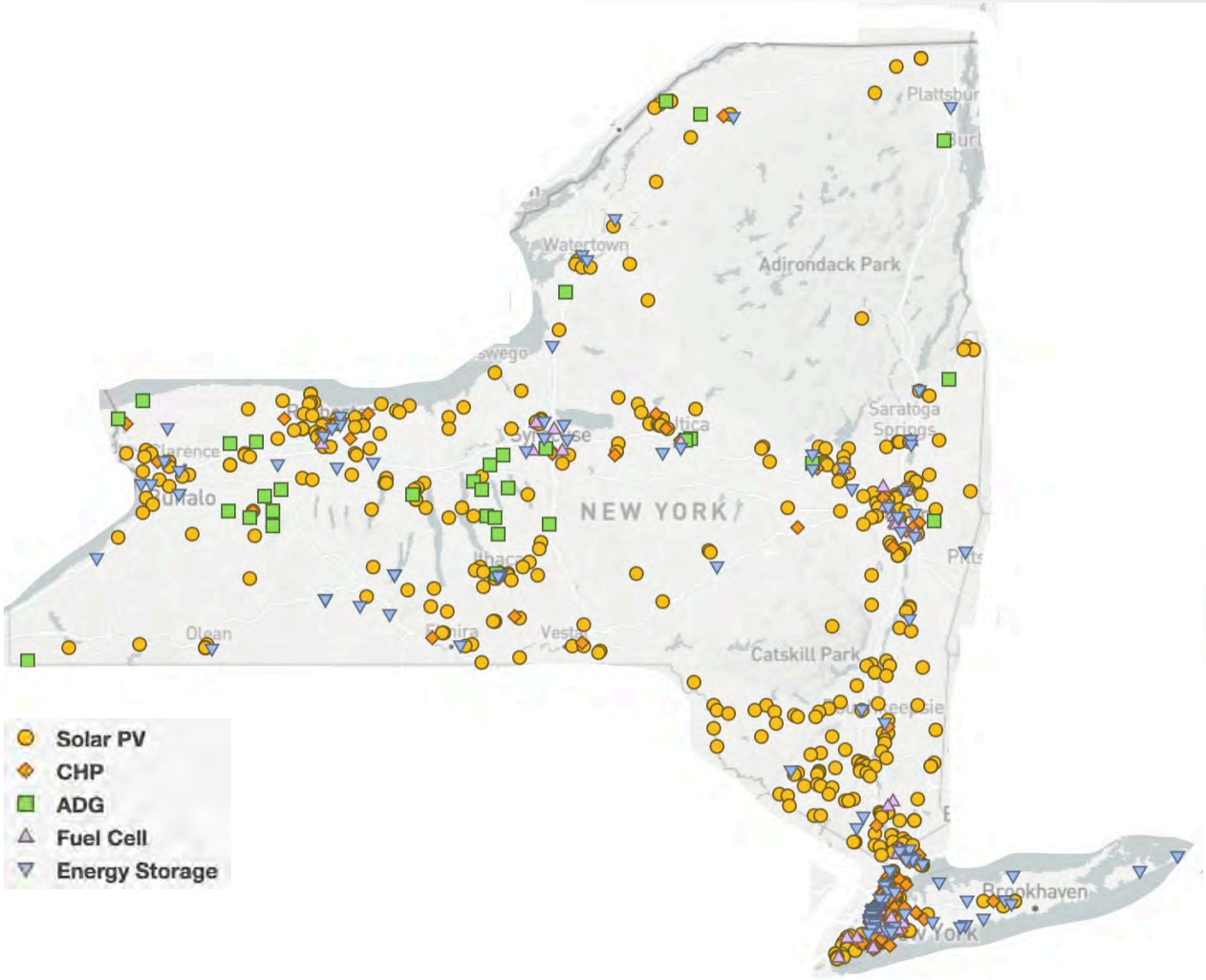
Wind:

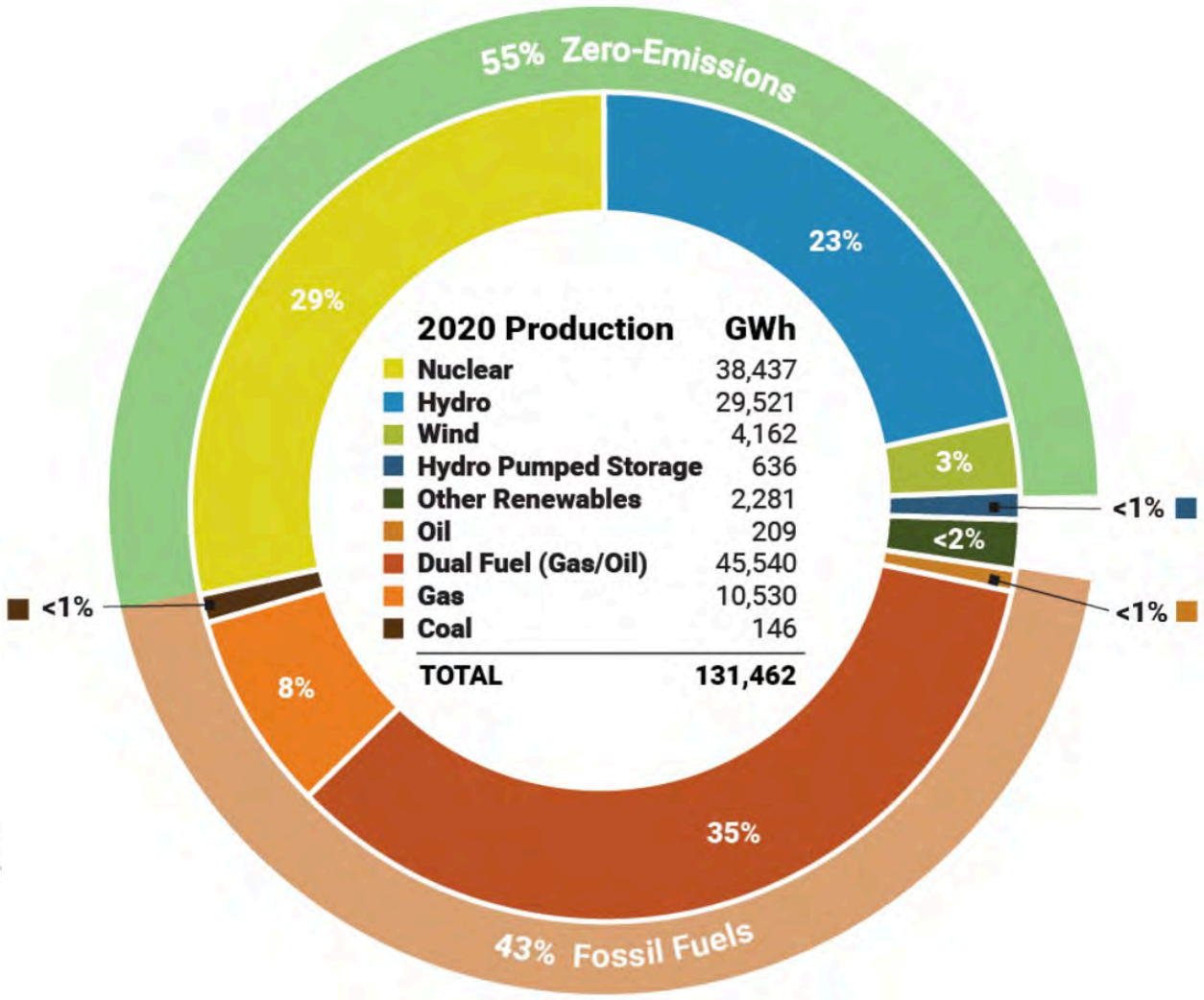
- Visual/aesthetic impacts
- Noise
- Shadow flicker

Energy Storage:

- Fire safety
- Incident management training

Snapshot: Clean Energy in NYS





Clean Energy in NYS

Processes for regulating/permitting clean energy development will vary based on size and type of the installation.

For solar/wind:

- **Projects < 25 MW: Permitted at local level (SEQR, municipal requirements)**
- **Projects > 25 MW: Permitted at State level (Article 10, Office of Renewable Energy Siting [ORES])**
- **Projects between 20 – 25 MW: May opt-in to State-level siting process through ORES**

For energy storage:

- **Projects paired (or "co-located") with large-scale renewable generators: Permitted at State level**
- **Projects not paired with large-scale generators: Permitted at local level**

Overview: Comprehensive Planning in NYS

Comprehensive Planning in NYS

Defining the Comprehensive Plan:

"Materials, written and/or graphic, including but not limited to maps, charts, studies, resolutions, reports and other descriptive material that identify the goals, objectives, principles, guidelines, policies, standards, devices and instruments for the immediate and long-range protection, enhancement, growth and development of the [municipality]"

Comprehensive Planning in NYS

Defining the Comprehensive Plan:

descriptive material **goals, objectives, principles, guidelines, policies, standards, devices and instruments** **immediate and long-range protection, enhancement, growth and development**

Comprehensive Planning in NYS

- **The *What*: what the community looks like now, and what it is envisioned to look like in the future.**
- **The *How*: how the community plans to get there.**
- **The *Why*: why those plans – or that future – is worth preserving/protecting/pursuing.**

- **Relationship with Zoning**
  - Villages: Village Law §7-722
  - Towns: Town Law §272-a
  - Cities: General City Law §28-a'
  - Counties: General Municipal Law § 239-d

"Land use regulations must be in accordance with a comprehensive plan"

Comprehensive Planning in NYS

Why is the Comprehensive Plan Important?

- **Zoning and Land-Use Regulations**
- **Consideration by other agencies (County/State/Federal)**
- **Helps ensure planning is not *responsive* to development**
- **Encourages communication & transparency**
- **Documentation of community's past/present/future**
- **Many other reasons!**

Comprehensive Planning in NYS

Key Considerations for Comprehensive Planning:

- **Documenting, Studying, and Understanding Existing Conditions (land uses, resources, etc.)**
- **Soliciting and Obtaining Community Input**
- **Adherence to a Consistent Process/Structure:**
  - Identify clear goals
    - Select and define objectives/strategies
      - Develop implementation plans
- **Funding!**

Comprehensive Planning in NYS

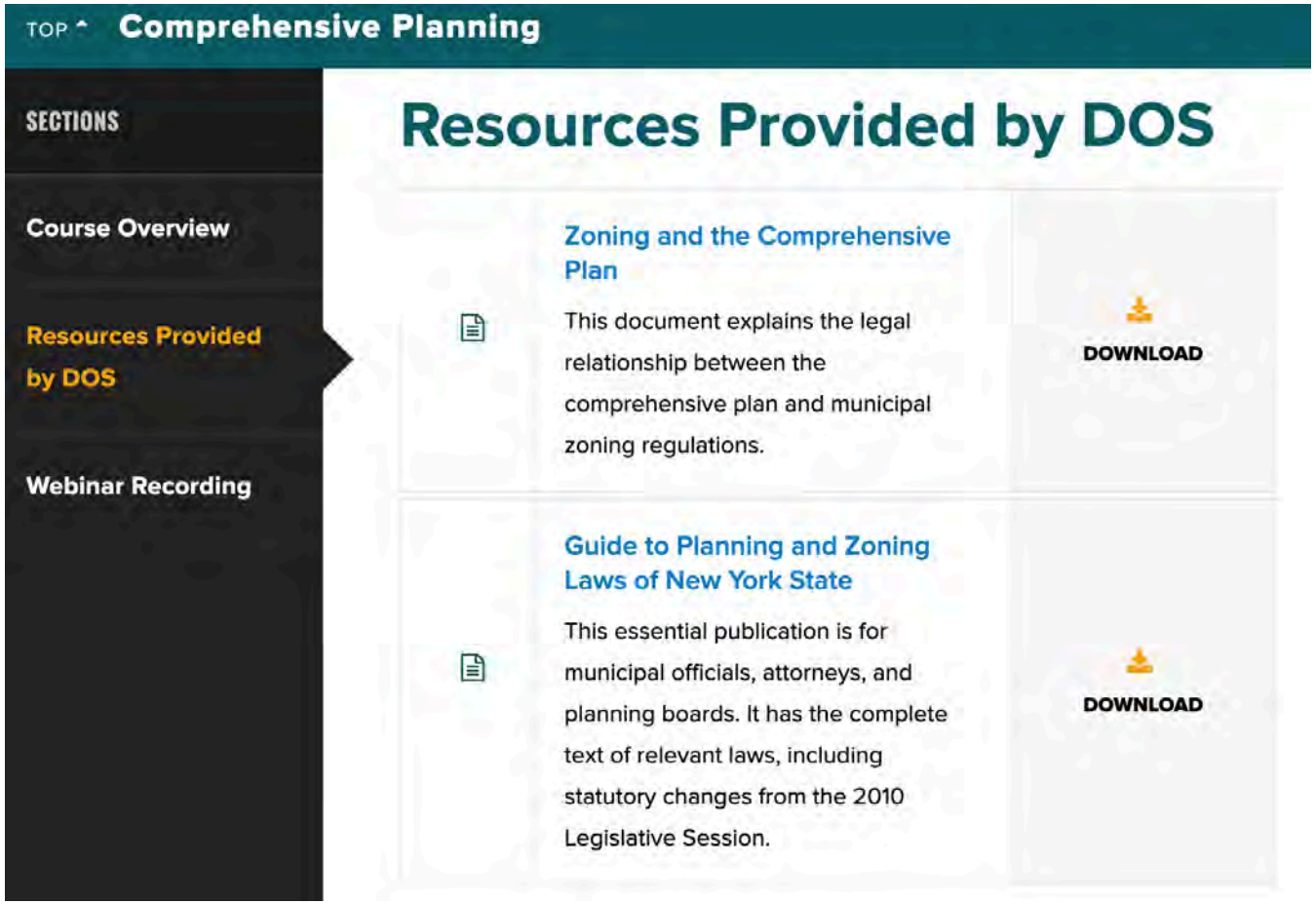
Comprehensive Planning as a Proactive vs. Reactive Exercise

NYS Training & Resources

NYS Dept. of State, Division of Local Government Services

- **Events: Local Government Training Schedule**
- **Resource: Zoning and the Comprehensive Plan**
- **Recording: Comprehensive Planning**

https://dos.ny.gov/comprehensive-planning



Clean Energy and Your Comprehensive Plan

Early Stages: Why Plan for Clean Energy?

- **It's in the name: Comprehensive Plan**
- **NYS Enabling Statutes: "in accordance with a comprehensive plan"**
- **Benefits:**
  - Tangible representation of jurisdiction's priorities and policies
  - Clarity for municipal boards, decision makers, project developers, etc.
  - May strengthen jurisdiction's position in event of legal dispute, challenge
  - Access to grants and incentives

Defining & Understanding Clean Energy:

Important to ensure that scope of community's understanding of/plans for clean energy aligns with technologies and programs supporting NYS programs/goals.

As such, "clean energy" should consider:
(1) Renewable generating technologies

(2) Technologies, strategies, and concepts which support implementation of renewables

Comprehensive Planning and Large-Scale Renewables

Permitting Regimes for Large-Scale Renewable Generators:

Article 10:

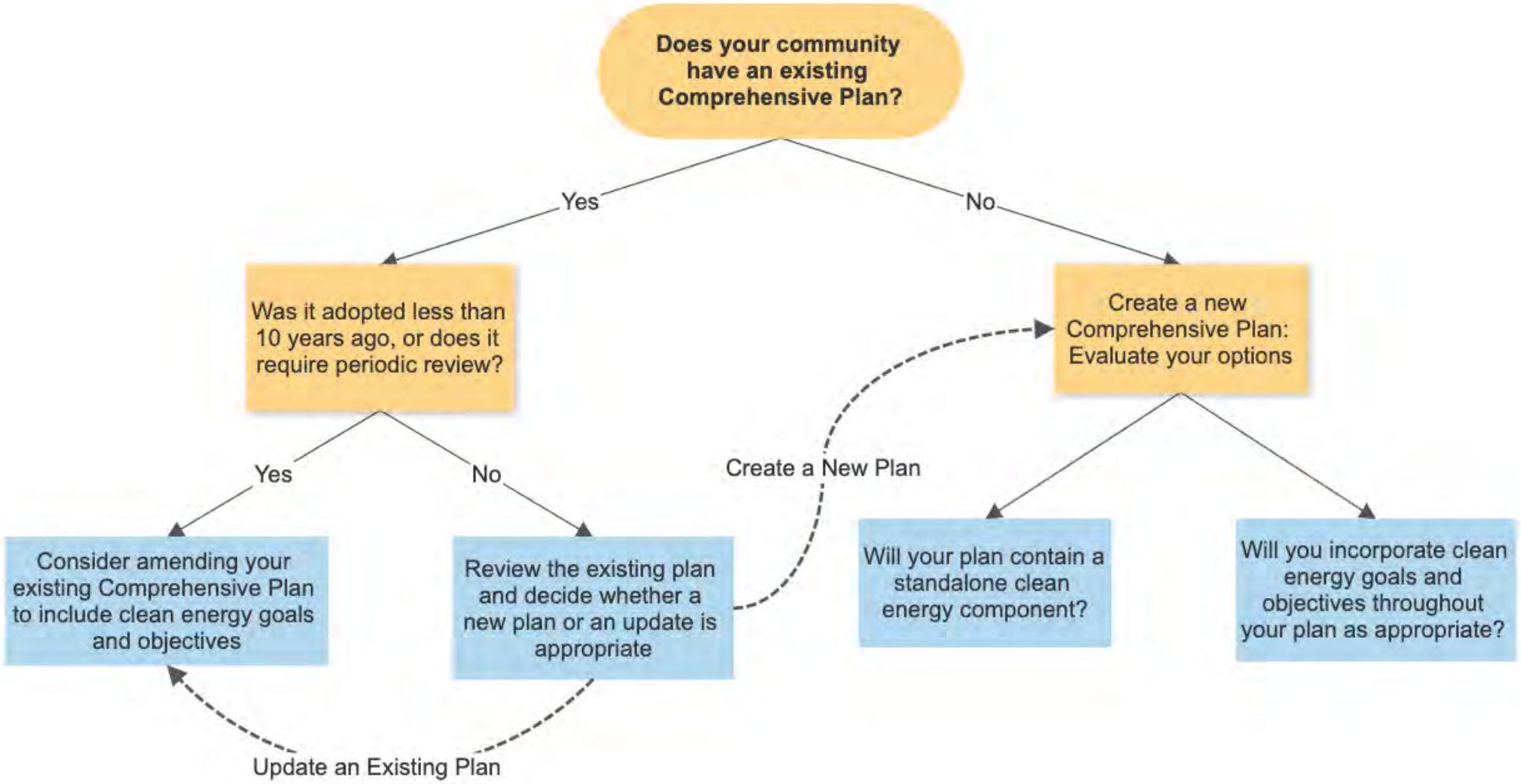
- **Exhibit 4: Land Use**

ORES:

- **Exhibit 3: Location of Facilities and Surrounding Land Use**

"A statement as to whether any applicable local jurisdiction has an adopted comprehensive plan applicable to lands on which facility components or ancillary facilities are located and whether the proposed facility is consistent with such comprehensive plan. A copy of the plan shall be provided in the application, with an indication of plan sections applicable to the proposed uses."

Selecting a Plan Format & Process



Land-Use Moratoria

The What: **A local law or ordinance suspending (for a reasonable time) property owners' rights to obtain development approvals.**

The Why: **Grant time to consider, draft, and adopt land-use plans to respond to circumstances not adequately dealt with under its current laws.**

The How: **Requires the local legislature to formally adopt and file a law or ordinance.**

Things to Consider:

- "Reasonableness"
- Impacts on landowners/community
- Specificity of timeline & scope
- Legal standing

Steps: Comprehensive Planning for Clean Energy

(1) Adopt a policy resolution or statement

- Assert overall goals of comprehensive planning process regarding clean energy
- State intention to consider clean energy development in municipal plans, regulations.
- Outline previously identified plan format/process (New plan? New component?)

(2) Identify funding and resources required

- Can be incorporated into resolution/statement
- Consideration of using of in-house municipal staff, County/regional planning staff, volunteers, hired consultants, etc.
- Identify and apply for grant funding, as available.

Comprehensive Planning for Clean Energy

(3) Identify the body/individuals charged with developing the plan

- Can be incorporated into resolution/statement
- Whether it be the local legislature, Planning Board, or Special Board/Committee, ensure individuals are educated and up to speed on clean energy programs, goals, and technologies.

(4) Determine existing conditions

- Numerous existing conditions considerations relevant to clean energy

Examples of Existing Conditions Related to Clean Energy:

Energy & Grid Considerations:
- Utility hosting capacity
- Proximity to grid infrastructure
- Municipal energy profile

Agricultural Considerations:
- Lands in Certified Ag Districts or under Ag Assessments
- Soil types/qualities

Environmental Considerations:
- Environmental resources assessments (endangered/sensitive species, wetlands, etc.)

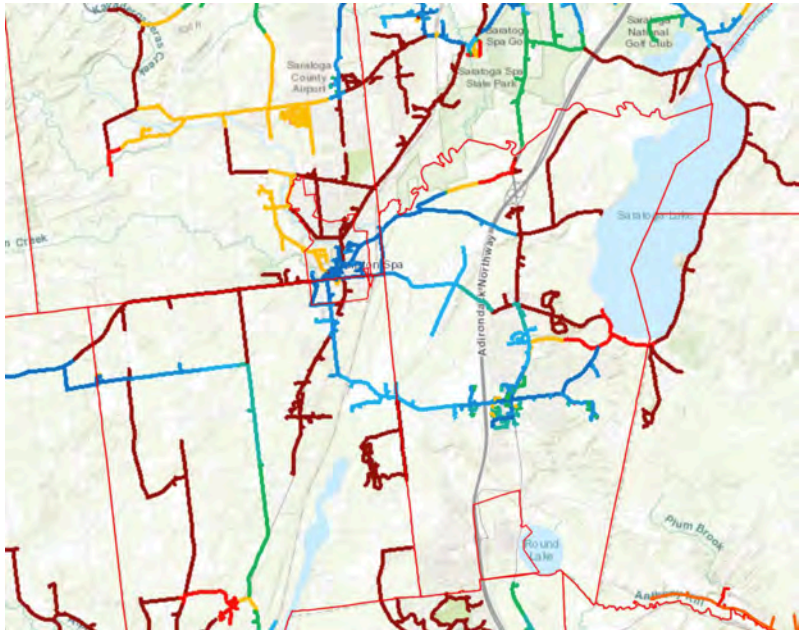
Socioeconomic Considerations:
- Disadvantaged communities, environmental justice communities

Example: Determine Existing Conditions

Utility Hosting Capacity Mapping Exercise

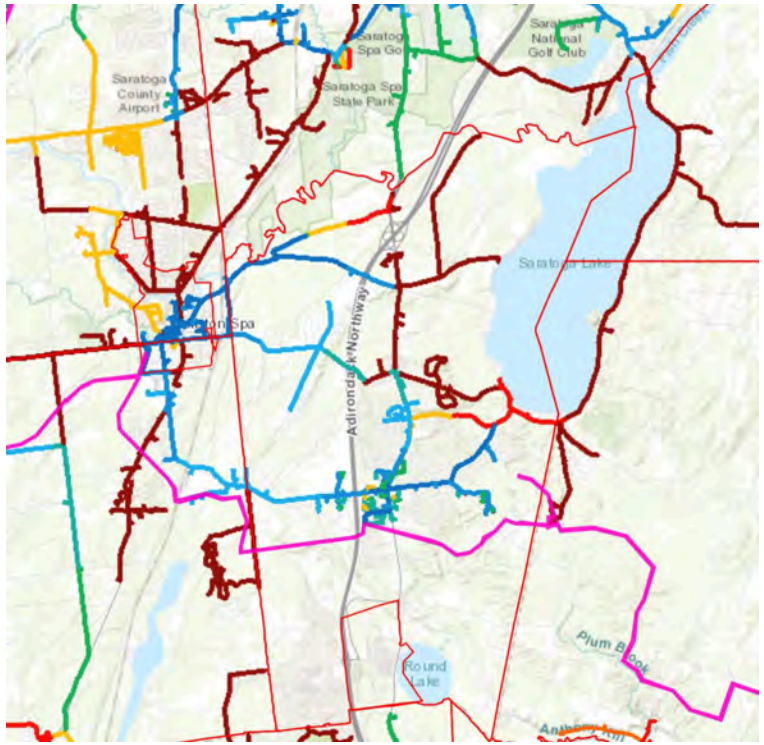
Purposes of this exercise:

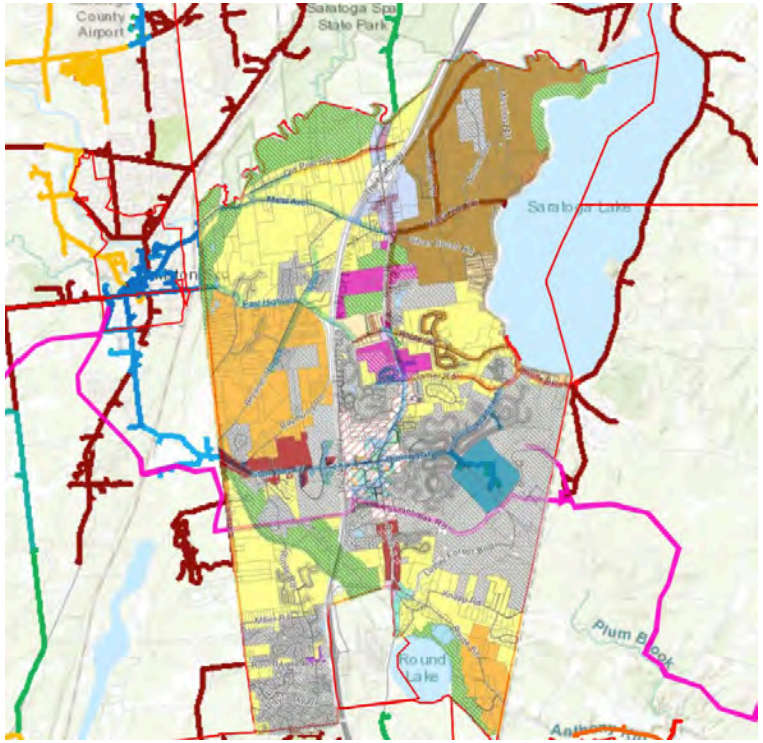
- **Visualize local energy distribution infrastructure**
- **Identify general potential locations for solar development based on select criteria:**
  - Grid proximity
  - Grid hosting capacity
  - Existing zoning
  - Proximal land use

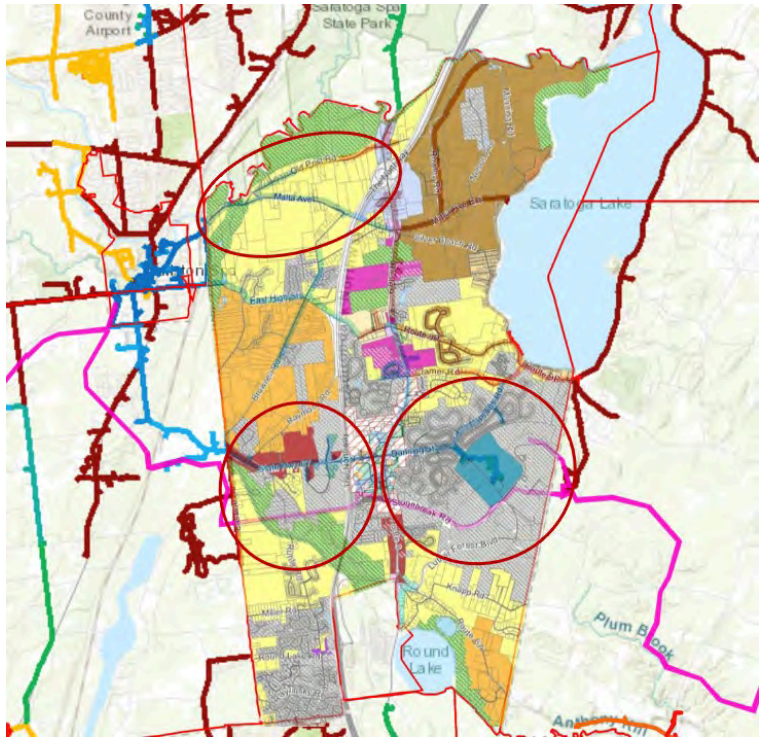


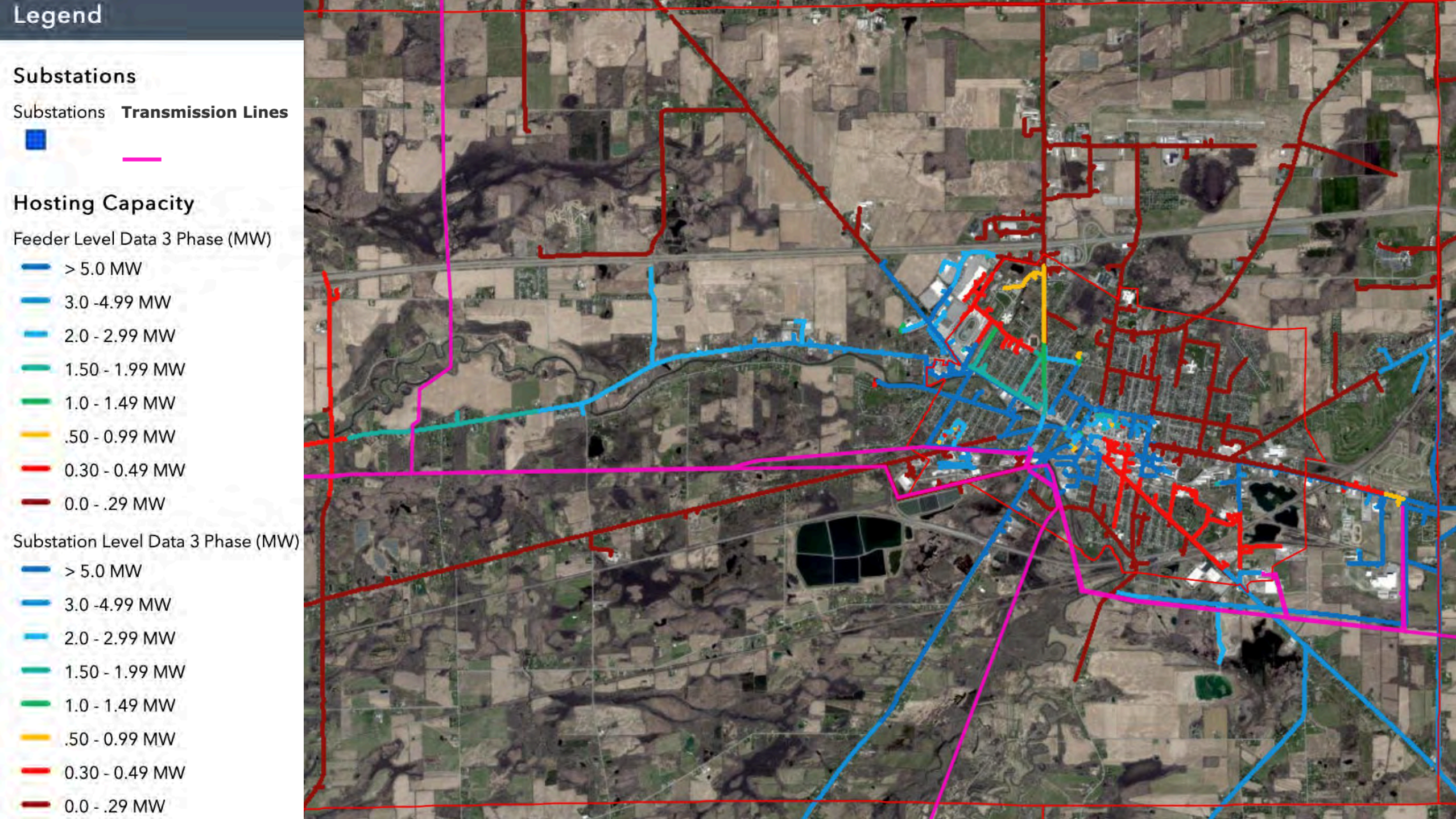
Example: Determine Existing Conditions

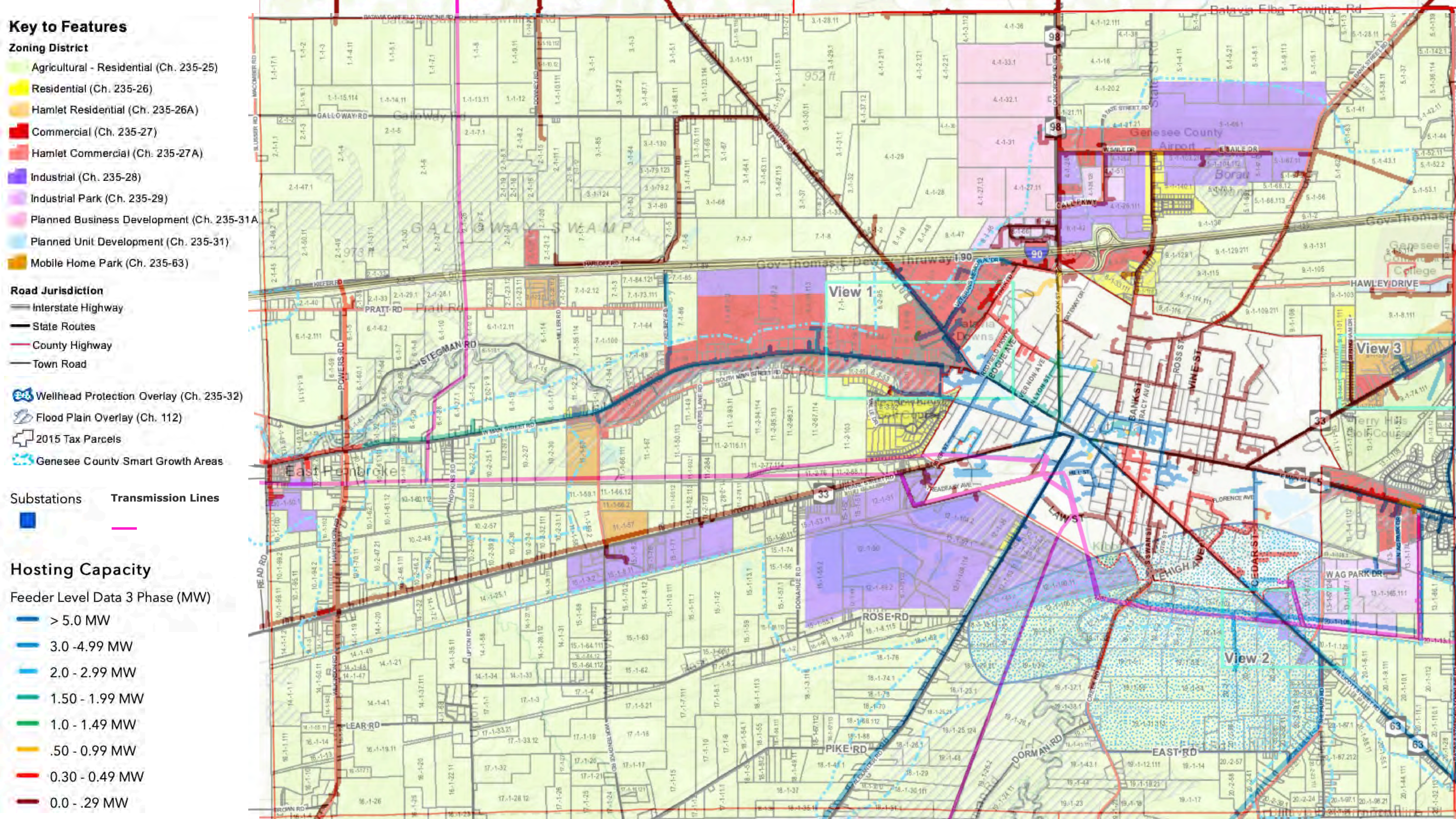
Utility Hosting Capacity Mapping Exercise








Legend
Substations
Substations
Transmission Lines
Hosting Capacity
Feeder Level Data 3 Phase (MW)
> 5.0 MW
3.0 -4.99 MW
2.0 - 2.99 MW
1.50 - 1.99 MW
1.0 - 1.49 MW
.50 - 0.99 MW
0.30 - 0.49 MW
0.0 - .29 MW
Substation Level Data 3 Phase (MW)
> 5.0 MW
3.0 -4.99 MW
2.0 - 2.99 MW
1.50 - 1.99 MW
1.0 - 1.49 MW
.50 - 0.99 MW
0.30 - 0.49 MW
0.0 - .29 MW



Key to Features
Zoning District
Agricultural - Residential (Ch. 235-25)
Residential (Ch. 235-26)
Hamlet Residential (Ch. 235-26A)
Commercial (Ch. 235-27)
Hamlet Commercial (Ch. 235-27A)
Industrial (Ch. 235-28)
Industrial Park (Ch. 235-29)
Planned Business Development (Ch. 235-31A)
Planned Unit Development (Ch. 235-31)
Mobile Home Park (Ch. 235-63)
Road Jurisdiction
Interstate Highway
State Routes
County Highway
Town Road
Wellhead Protection Overlay (Ch. 235-32)
Flood Plain Overlay (Ch. 112)
2015 Tax Parcels
Genesee County Smart Growth Areas
Substations
Transmission Lines
Hosting Capacity
Feeder Level Data 3 Phase (MW)
> 5.0 MW
3.0 -4.99 MW
2.0 - 2.99 MW
1.50 - 1.99 MW
1.0 - 1.49 MW
.50 - 0.99 MW
0.30 - 0.49 MW
0.0 - .29 MW
View 1
View 2
View 3
GALLOWAY SWAMP
Gov Thomas E Dewey Thruway
Genesee County Airport
East Pembroke
Batavia Elba Townline Rd
GALLOWAY RD
PRATT RD
STEGMAN RD
ROSE RD
PIKE RD
LEAR RD
EAST RD
DORMAN RD
LAW ST
LEHIGH AVE
CEDAR ST
BANK ST
ROSS ST
WAG PARK DR
HAWLEY DRIVE
READ RD
POWERS RD

Comprehensive Planning for Clean Energy

(5) Design Effective Public Outreach and Education

- Input from a wide range of diverse stakeholders is key; for clean energy, that may include utility representatives and local/regional environmental groups and non-profits.
- Allows you to formulate community concerns, issues, problems, and priorities.
- Should include questions/opportunities focused on feedback regarding sustainability and clean energy.

Example: Comp Plan Committee meeting notice on Town's website:

(6) Create Clean Energy Content for Your Plan!

Comprehensive Planning for Clean Energy

(7) Complete the legally required process

- Referral of approved plan by Planning/Special Board to local legislature, Planning Board, County/Regional planning authority, etc.
- Public hearing(s)
- Environmental review (SEQR), Agricultural review (if needed)
- Establish terms for periodic review

(8) Publicize, disseminate, and implement the plan!

Example: GEIS prepared for Comp Plan Adoption, as required in accordance with SEQR

FINAL SUPPLEMENTAL GENERIC ENVIRONMENTAL IMPACT STATEMENT

TOWN OF YORKTOWN
2009 COMPREHENSIVE PLAN

Creating Clean Energy Content

Goals & Objectives:

- **Should reflect information gathered from existing conditions studies, public engagement**
- **Goals = longer term; more broadly focused**
- **Objectives = lay out intentions which support goals; more specifically focused**

Sample Goals and Objectives for Clean Energy:

***Goal*:** Support the transition towards clean energy sources.

- ***Objective:*** Allow and incentivize individuals and businesses to use renewable energy electric generation facilities and undertake energy efficiency initiatives.
- ***Objective***: Support the expansion of clean energy opportunities through the *Town's* land use policies, plans, and regulations.
- ***Objective***: Streamline the project review and approval processes so that it is efficient and predictable.

Creating Clean Energy Content

Goals & Objectives (cont.):

Sample Goal and Objectives for Clean Energy:

Goal: Balance clean energy development and continued agricultural operations.

- ***Objective:*** Allow clean energy projects in priority agricultural areas only if mitigation for agricultural impacts have been identified and addressed***.***
- ***Objective:*** Encourage solar and other renewable energy production that is compatible with agricultural-related businesses.
- ***Objective:*** Prioritize balanced siting of clean energy projects on priority farmland identified for protection.

Creating Clean Energy Content

Goals & Objectives (cont.):

Additional goals to consider:

- Achieving financial, socioeconomic, and other benefits associated with economic development (employment, tax revenue, etc.)
- Preventing, mitigating, and/or adapting to impacts of climate change (decreasing use of fossil fuels, diversified electric grid for resiliency, etc.)
- Aligning with NYS goals, policies, and programs on climate and clean energy (Climate Smart Communities, Clean Energy Communities, and other grant opportunities)

Creating Clean Energy Content

Strategies:

- **Offer specific policies/actions which support selected goals/objectives**
- **Should reflect resources, programs, and assistance available to municipalities**

Example: Incorporating strategies for corresponding goals/objectives

***Goal*:** Support the transition towards clean energy sources.

- ***Objective:*** Allow and incentivize individuals and businesses to use renewable energy electric generation facilities and undertake energy efficiency initiatives.
  - ***Strategies***: Offer the RPTL § 487 tax exemption for clean energy systems; pursue Community Choice Aggregation (CCA).
- ***Objective***: Support the expansion of clean energy opportunities through the *Town's* land use policies, plans, and regulations.
  - ***Strategies***: Amend local zoning to reflect balanced approach to clean energy; utilize and modify, as needed, NYSERDA model clean energy laws; adopt the NYStrech Energy Code.
- ***Objective***: Streamline the project review and approval processes so that it is efficient and predictable.
  - ***Strategies***: Utilize clean energy-specific permits and inspection processes; digitize permit applications and fee payments.

Creating Clean Energy Content

Strategies (cont.):

Goal: Balance clean energy development and continued agricultural operations.

- ***Objective:*** Allow clean energy projects in priority agricultural areas only if mitigation for agricultural impacts have been identified and addressed***.***
  - ***Strategies***: Amend local zoning requirements to identify and require adherence to Town's preferred mitigation strategies (e.g. adherence to NYS Dept of Ag and Markets guidelines for solar on agricultural lands).
- ***Objective:*** Encourage solar and other renewable energy production that is compatible with agricultural-related businesses.
  - ***Strategies***: Amend local zoning requirements to encourage the co-location of renewables and agricultural activities or land-uses.
- ***Objective:*** Prioritize balanced siting of clean energy projects on farmland identified for protection.
  - ***Strategies***: Identify specific soil categories and/or physical areas for prioritization, while considering historic and current land uses; ensure alignment with local zoning and other land use policies; amend local zoning to guide clean energy development to alternative parcels or locations, away from priority soils.

Creating Clean Energy Content

Implementation Plans:

- **Should designate responsibilities, identify available resources, and clarify timelines for selected goals, objectives, and strategies.**
- **Can be used to evaluate feasibility of selected objectives and strategies.**
- **Serve as a roadmap to ensure Comp Plan components are completed and not forgotten.**

Example: Implementation Plan for Clean Energy Goal

Goal	*Objective*	*Strategy*	*Responsible Party*	*Resources*	*Time Period*
Goal 1: Support the transition towards clean energy sources.	Streamline the project review and approval process so that it is efficient and predictable.	Adopt Unified Solar Permit	Town Board; Building Inspector	Unified Solar Permit Toolkit Technical assistance from NYSERDA CEC Program + Siting Team	___ months

Creating Clean Energy Content

Implementation Plans (cont.):

Goal	*Objective*	*Strategy*	*Responsible Party*	*Resources*	*Time Period*
Goal 2: Promote clean energy technologies in [*Municipality's*] services and facilities.	Maximize opportunities for municipal buildings and schools to use renewable energy resources, as feasible.	Adopt a benchmarking policy for municipal facilities.	Municipal legislature; Municipal administrative staff.	Technical and program assistance from NYSERDA Clean Energy Communities Program	___ months

Goal	*Objective*	*Strategy*	*Responsible Party*	*Resources*	*Time Period*
Goal 3: Support financial strategies that further clean energy development and decrease the cost of electricity.	Support residential and commercial clean energy projects through regulations and taxation policies	Ensure the RPTL § 487 tax exemption remains in place	Municipal legislature; Municipal assessor	NYSERDA Solar Guidebook for Local Governments NYS Department of Taxation and Finance resources	___ months

Goal	*Objective*	*Strategy*	*Responsible Party*	*Resources*	*Time Period*
Goal 4: Increase clean energy-related employment, business development, and training opportunities.	Encourage the development of education and training programs for clean energy employment opportunities.	Partner with local clean energy businesses to create paid internships and training opportunities.	Municipal staff; local businesses	Local / Regional Planning Agencies; NYSERDA Clean Energy Internship Program	___ months

Resources

Resources

Comprehensive Planning:

- NYSDOS Division of Local Government Services:
  - Zoning and the Comprehensive Plan
  - Guide to Planning and Zoning Laws of New York State
  - Legal Memo: "Defining a Community Through the Plan"
- Syracuse University: NYS Comprehensive Plan Development

Clean Energy:

- NYSERDA: Solar Guidebook, Energy Storage Guidebook
- American Planning Association:
  - Sustaining Places: Best Practices for Comprehensive Plans
  - Solar Energy, Knowledgebase Collection
- NYS Climate Smart Communities: Comprehensive Plan with Sustainability Elements

Resources

Funding and Technical Assistance:

- Local, County, and Regional Planning Agencies
- NYS Resources/Programs:
  - NYS Consolidated Funding Application
  - Climate Smart Communities Grant Program
  - NYS Dept. of Ag and Markets:
    - Farmland Protection Planning Grants Program
  - NYS Dept. of State:
    - Office of Planning and Development:
      Smart Growth Comprehensive Planning Grant Program
    - Division of Local Government Services:
      Local Government Efficiency Program


Q&A

To access resources, ask questions, or request technical assistance, please reach out to cleanenergyhelp@nyserda.ny.gov

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